

CLAIM AMENDMENTS

Claims 1-244 (cancelled)

245. (original) A construct which when present in a cell produces a product, said construct having at least one terminus comprising a polynucleotide tail hybridized to a complementary polynucleotide sequence and an antibody bound to said hybridized polynucleotide sequence, said construct being bound non-ionically to an entity comprising a chemical modification or a ligand.

246. (original) The construct of claim 245 wherein said antibody comprises a polyclonal or monoclonal antibody.

247. (currently amended) A composition comprising:

- (a) a non-natural entity which comprises:
 - at least one domain to a specific nucleic acid component and
 - at least one domain to a cell of interest and
- (b) said specific nucleic acid component; wherein said nucleic acid component is a nucleic acid sequence desired to be delivered to said cell
wherein the domain or domains to said nucleic acid component are different from the domain or domains to said cell, and wherein said specific nucleic acid component is bound to said entity through said domain to a specific nucleic acid component.

248. (original) The composition of claim 247, wherein said entity comprises a binder.

249. (original) The composition of claim 248, wherein said binder and said domain are the same.

250. (original) The composition of claim 248, wherein said binder and said domain are different.

251. (original) The composition of claim 248, wherein said binder is selected from a polymer, a matrix, a support, or a combination of any of the foregoing.

Claim 252 (canceled)

253. (original) The composition of claim 247, wherein said cell is prokaryotic or eukaryotic.

254. (original) The composition of claim 247, wherein said domains are attached covalently or noncovalently, or through a binder, or a combination thereof.

255. (original) The composition of claim 254, wherein said noncovalent binding is selected from ionic interactions and hydrophobic interactions, or a combination thereof.

Claim 256 (cancelled)

257. (previously presented) The composition of claim 255, wherein said specific binding is mediated by a ligand binding receptor.

258. (previously presented) The composition of claim 257, wherein said ligand binding receptor is selected from the group consisting of a polynucleotide sequence to be recognized by its complementary sequence, an antigen to be recognized by its corresponding monoclonal or polyclonal antibody, an antibody to be recognized by its corresponding antigen, a lectin to be recognized by its corresponding sugar, a hormone to be recognized by its receptor, a receptor to be recognized by its hormone, an inhibitor to be recognized by its enzyme, an enzyme to be recognized by its inhibitor, a cofactor to be recognized by its

cofactor enzyme binding site, a cofactor enzyme binding site to be recognized by its cofactor, a binding ligand to be recognized by its substrate, and a combination of the foregoing.

259. (previously presented) The composition of claim 247, wherein the domain to said nucleic acid component and the domain to said cell of interest are natural, and said binder is attached to said nucleic acid component by means other than a natural binding site.

260. (original) The composition of claim 259, wherein said binder comprises modified fibronectin or modified polylysine, or both.

261. (original) The composition of claim 247, wherein said cell of interest is contained within an organism.

262. (original) The composition of claim 247, further comprising said cell of interest.

263. (previously presented) A method of introducing a nucleic acid component into a cell comprising:

- (a) providing the composition of claim 247 and
- (b) administering said composition.

264. (original) The method of claim 263, wherein administering is carried out *in vivo*.

265. (original) The method of claim 263, wherein administering is carried out *ex vivo*.

Claims 266-305 (canceled)

306. (new) A kit which comprises:

(a) a non-natural entity which comprises at least one domain to a specific nucleic acid component and at least one domain to a cell of interest;

(b) said specific nucleic acid component and

(c) buffers and instructions,

wherein said nucleic acid component is a nucleic acid sequence desired to be delivered to said cell wherein the domain or domains to said nucleic acid component are different from the domain or domains to said cell, and wherein said specific nucleic acid component is bound to said entity through said domain to a specific nucleic acid component.